

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claim 1 (Currently Amended) A sorption ~~module-tube~~tube comprising a generator section connected via a first passage to a condenser section, wherein the ~~module-tube~~tube contains a sorbent material within its generator section and a quantity of sorbate fluid, wherein the condenser section is connected by a second passage to an evaporator section, the generator, condenser, and evaporator sections being so arranged or interlinked such that liquid in the condenser section is encouraged to flow to the evaporator section and discouraged from flowing to the generator section and the quantity of sorbate fluid and pressure within the ~~module-tube~~tube is such that, when the sorbent material is saturated with adsorbed or absorbed sorbate and at its lowest anticipated operating temperature, the evaporator section is substantially filled with sorbate liquid.

Claim 2 (Currently Amended) The sorption ~~module-tube~~tube of claim 1, wherein the evaporator section is located below the condenser section and the second passage is downwardly extending whereby liquid in the condenser section is encouraged to flow into the evaporator section under action of gravity.

Claim 3 (Currently Amended) The sorption ~~module-tube~~tube of claim 1, wherein the first and second passages comprise adiabatic sections.

Claim 4 (Currently Amended) The sorption ~~module-tube~~tube of claim 1, wherein the condenser and/or evaporator sections have a surrounding arrangement of heat-conducting fins.

Claim 5 (Currently Amended) The sorption ~~module~~tube of claim 1, wherein the generator section has an external arrangement of heat-conducting fins.

Claim 6 (Currently Amended) The sorption ~~module~~tube of claim 1, wherein the generator section has an internal arrangement of heat-conducting fins with one or more voids sufficient to permit gas transport therebetween.

Claim 7 (Currently Amended) The sorption ~~module~~tube of claim 6, wherein the sorbent material is solid and packed between the internal fins.

Claim 8 (Currently Amended) The sorption ~~module~~tube of claim 6, wherein the sorbent material is liquid and the first passage extends upwardly within the sorbent tube, its opening being located above the uppermost level of liquid sorbent.

Claim 9 (Currently Amended) The sorption ~~module~~tube of claim 1, wherein the sorbent material is chosen from one of the group of active carbons, zeolites, silica gels, metal halides, metal alloys, water or a combination thereof.

Claim 10 (Currently Amended) The sorption ~~module~~tube of claim 9, wherein the sorbate fluid is chosen from one of the group of ammonia, water, alcohols, hydrogen, hydrocarbons, hydrofluorocarbons and carbon dioxide.

Claim 11 (Currently Amended) The sorption ~~module~~tube of claim 1, further comprising a porous plug of inert material within the second passage.

Claims 12–32 (Canceled).

Claim 33 (New) The sorption tube of claim 1, wherein the evaporator section of the tube directly connects to the condenser section of the tube without separation by a valve.